

## NFPA DESIGNATION 704

HAZARD RATING	HEALTH	1
4=Extreme		
3=High	FIRE	3
2=Moderate		
1=Slight	REACTIVITY	0
0=Insignificant		
	SPECIFIC HAZARD	NONE



## MATERIAL SAFETY DATA SHEET

## SECTION 1 NAME AND PRODUCT

MANUFACTURER'S NAME: SUNNEN PRODUCTS COMPANY  
 ADDRESS: 7910 Manchester Ave.  
 St. Louis, Mo. 63143  
 United States of America

CONTACT: Terry Heller  
 EMERGENCY PHONE NO: 314-781-2105  
 APPROVED BY: Terry Heller  
 TITLE: Manager, Materials R/D  
 DATE: August 15, 1987

TRADE NAME, COMMON NAME OR SPECIFICATION: VS-200 VALVE SEAT MARKER

CHEMICAL FAMILY: SPECIALTY LACQUER. CLASSIFICATION:(D.O.T.) PAINT. D.O.T. SHIPPING CLASS: FLAMMABLE LIQUID I.D. Number:UN-1263

## SECTION 2 HAZARDOUS INGREDIENTS/IDENTITY (PER 29 C.F.R. 1910.1200(g))

COMMON NAME	CHEMICAL NAME OF COMPONENTS	CAS NO	WT %	OSHA PEL mg/cu m	ACGIH TLV-TWA mg/cu m	CARCINOGENIC
DYES	DYES (METHYL VIOLET)	8004-87-3	1	NONE	NONE	N
SOLVENTS	BUTYL ACETATE	123-86-4	33	150 PPM	150 PPM	N
SOLVENTS	DENATURED ALCOHOL	64-17-5	57	1000 PPM	1000 PPM	N
SOLVENTS	BUTYL ALCOHOL	71-36-3	4	100 PPM	50 PPM SKIN (Ceiling Limit)	N
VEHICLE	WET NITROCELLULOSE	9004-67-63.0	5	NONE	NONE	N

PPM=Parts per Million

FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS, INDUSTRIAL SALES DEPARTMENT.

## SECTION 3 PHYSICAL &amp; CHEMICAL CHARACTERISTICS

SPECIFIC GRAVITY (WATER=1)----- .86  
 BOILING POINT----- 160 F (71 C)  
 PERCENT VOLATILE BY WEIGHT----- 90%  
 VAPOR PRESSURE (mm Hg)----- 36 mm Hg @ 68 F (20C)  
 VAPOR DENSITY (Air=1)----- Heavier than air.  
 EVAPORATION RATE----- Solvent Component: faster than butyl acetate.  
 Note: Residual marking substances are non-volatile.  
 SOLUBILITY IN WATER----- Appreciable  
 REACTIVITY IN WATER----- Not reactive  
 APPEARANCE AND ODOR----- Intense blue color. Mild odor.

## SECTION 4 SPECIAL PRECAUTIONS

HANDLING AND STORAGE: DO NOT STORE NEAR FIRE OR FLAME.

OTHER: DO NOT SMOKE WHEN FUMES ARE PRESENT. USE WITH POSITIVE VENTILATION.

## SECTION 5 CORROSIVITY AND REACTIVITY DATA

STABILITY: MATERIAL IS STABLE.  
 POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.  
 INCOMPATIBILITY: STRONG OXIDIZING MATERIALS SUCH AS CHLORINE.  
 (materials to avoid)  
 DECOMPOSITION PRODUCTS: COMBUSTION OF MATERIAL WILL PRODUCE OXIDES OF CARBON.

## SECTION 6 HEALTH, FIRST AID AND MEDICAL DATA

## ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE

PRIMARY ROUTE(S) OF ENTRY ARE INHALATION, INGESTION AND SKIN CONTACT. ABBREVIATIONS USED IN THE FOLLOWING SECTION: NAIF=NO APPLICABLE INFORMATION FOUND, SKIN=SKIN ABSORPTION, EYE=EYE CONTACT, INHAL=INHALATION, INGEST=INGESTION

ACETIC ACID, BUTYL ESTER (N-BUTYL ACETATE): ACUTE: SKIN: Causes irritation of skin. Nonspecific drying, cracking and increased susceptibility to infection. EYE: Causes eye irritation. INHAL: Causes irritation of upper respiratory system. Headache, drowsiness and drunkenness at high concentration. Affects central nervous system. INGEST: NAIF. CHRONIC: SKIN: NAIF. EYE: NAIF. INHAL: Kidney and blood changes in experimental animals. Affects lungs, thorax and breathing. INGEST: NAIF.

BUTYL ALCOHOL (N-BUTANOL): ACUTE: SKIN: Causes skin irritation and dermatitis. EYE: Causes irritation and inflammation. INHAL: Irritates the nose and eyes. Affects lungs, thorax and breathing. INGEST: Expected to be non-toxic based on literature reports that the LD50=790 mg/kg (rats). CHRONIC: SKIN: NAIF. EYE: NAIF. INHAL: NAIF. INGEST: NAIF.

ETHYL ALCOHOL: ACUTE: SKIN: May cause drying and irritation. Literature reports the Skin irritation to be 900 mg Severe (Rabbits). EYE: May cause eye irritation. Literature reports the Eye irritation (Rabbits) to be 100 mg. Severe. INHAL: May produce headache, drowsiness, tremors, and fatigue. Literature reports the Inhalation Toxicity to be (Rats) LC50=20000 PPM INGEST: Denaturants produce strange symptoms beyond intoxication. May act as an adjuvant increasing toxicity of other agents. Literature reports the Toxicity oral (Rats) LD50=7060 mg/kg. CHRONIC: SKIN: NAIF. EYE: NAIF. INHAL: NAIF. INGEST: NAIF.

## EMERGENCY FIRST AID

INHALATION: Remove to fresh air. If not breathing, begin mouth to mouth resuscitation. Seek medical attention.  
 EYE CONTACT: Remove contact lenses (if wearing) and flush eyes with water to remove particulates. Seek medical attention to check for possible irritation. SKIN CONTACT: Brush off excess dust. Wash hands with mild non-abrasive soap and water. INGESTION: Seek medical attention.

## SECTION 7 HANDLING, STORAGE AND USE PROCEDURES

NORMAL STORAGE AND HANDLING: STORE IN WELL VENTILATED AREAS AWAY FROM SOURCES OF IGNITION AS DAMAGED OR LEAKING CANS WILL RELEASE SOLVENT WHICH IS HIGHLY FLAMMABLE, HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK CAUSING THE CONTAINER TO BURN OR EXPLODE. KEEP OUT OF THE REACH OF CHILDREN.

NORMAL USE: USE ONLY WITH ADEQUATE VENTILATION.

STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS: VENTILATE AREA. WEAR PERSONAL PROTECTIVE EQUIPMENT. REMOVE HEAT AND IGNITION SOURCES. ABSORB IN WASTE MATERIAL THAT CAN BE BURNED.

WASTE DISPOSAL METHODS: INCINERATE OR NORMAL DISPOSAL FOR FLAMMABLES. DISPOSE OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, RULES, ORDERS AND ORDINANCES.

## SECTION 8 PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: IF TLV IS EXCEEDED OR FOR SYMPTOMS OF OVER EXPOSURE, WEAR NIOSH APPROVED ORGANIC VAPOR RESPIRATOR.  
 VENTILATION: ENSURE FRESH AIR ENTRY DURING USE. IF TLV LEVELS ARE APPROACHED OR ANY DISCOMFORT IS EXPERIENCED PROVIDE POSITIVE MECHANICAL VENTILATION.  
 PROTECTIVE GLOVES: IF PREFERRED OR IF SENSITIVITY TO MATERIAL HAS BEEN DEMONSTRATED.  
 EYE PROTECTION: ALWAYS WEAR SAFETY GLASSES WHEN WORKING ON OR AROUND MACHINERY.

## SECTION 9 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 61 F (16 C) Method used: T.O.C.  
FLAMMABLE LIMITS LEL (lower) UEL (upper) Method: Unknown.  
IN AIR % BY VOLUME 1.4 11.2  
EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE OR DRY CHEMICAL.  
SPECIAL FIRE FIGHTING PROCEDURES: WEAR POSITIVE PRESSURE, SELF-CONTAINED RESPIRATORY EQUIPMENT. WATER MAY BE USED TO COOL FIRE EXPOSED CONTAINERS.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG GROUND; OR MAY BE MOVED BY VENTILATION AND IGNITED BY SPARKS, FLAME OR OTHER IGNITION SOURCES.

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